AMENDMENTS TO THE CLAIMS

1-41. (Canceled)

42. (Currently amended) A machine-implemented method for managing event-condition-action rules in a database system, the method comprising the computer-implemented steps performed by said database system of:

storing, in a database managed by said database system, rule data ~~in a database~~ that defines ~~represents~~ a composite event comprised of two or more primitive events, at least one condition related to the composite event, and at least one action to be performed upon satisfaction of said at least one condition~~related to the composite event~~;

detecting a first database event as an occurrence of a first one of the primitive events;

determining whether the first database event satisfies ~~the at least one condition~~ a first sub-condition of said at least one condition, wherein said rule data indicates that satisfaction of said first sub-condition is not sufficient to satisfy said at least one condition; ~~related to the composite event;~~

persistently storing ~~the result of the determining~~ in the database results data that indicates that said first sub-condition was satisfied by said first database event;

detecting a second database event as an occurrence of a second one of the primitive events; [[and]]

reading said results data from said database;

determining whether the at least one condition is satisfied based on the ~~persistently stored~~ results data read from the database and the second database event.

43. (Currently amended) The method as recited in Claim 42, further comprising:

determining that the at least one condition is satisfied by determining that the second database event was detected within a particular time after detecting the first database event~~; and~~

~~wherein the persistently stored result indicates the time the first database event was detected~~.

44. (Currently amended) The method as recited in Claim 42, further comprising:

determining that the at least one condition is satisfied by determining that the second database event was not detected within a particular time after detecting the first database event~~; and~~

~~wherein the persistently stored result indicates the time the first database event was detected~~.

45. (Canceled)

46. (Canceled)

47. (Previously Presented) The method as recited in Claim 42, further comprising:
deleting the persistently stored result from the database after a period of time indicated by the at least one condition.

48. (Currently amended) The method as recited in Claim 42, further comprising:
determining that the at least one condition is satisfied ~~by~~ based on the ~~persistently stored~~ results data read from the database and the second database event; and
performing the at least one action ~~related to the composite event~~.

49. (Currently amended) The method as recited in Claim 42, wherein the composite event comprised of two or more primitive events, the at least one condition related to the composite event, and the at least one action ~~related to the composite event~~ are specified in an expression received by the database system, the expression identifying two or more primitive event structures, a join condition on the two or more primitive events, and the at least one action to perform in response to satisfying the join condition.

50. (Previously Presented) The method as recited in Claim 49, where the expression is specified using XML-extended SQL syntax.

51. (Currently amended) A computer-readable volatile or non-volatile storage medium for managing event-condition-action rules in a database system comprising one or more

sequences of instructions which, when executed by a processor of said database system, cause the processor to perform:

storing, in a database managed by said database system, rule data ~~in a database~~ that defines ~~represents~~ a composite event comprised of two or more primitive events, at least one condition related to the composite event, and at least one action to be performed upon satisfaction of said at least one condition~~related to the composite event~~;

detecting a first database event as an occurrence of a first one of the primitive events;

determining whether the first database event satisfies ~~the at least one condition~~ a first sub-condition of said at least one condition, wherein said rule data indicates that satisfaction of said first sub-condition is not sufficient to satisfy said at least one condition; ~~related to the composite event;~~

persistently storing ~~the result of the determining~~ in the database results data that indicates that said first sub-condition was satisfied by said first database event;

detecting a second database event as an occurrence of a second one of the primitive events; [[and]]

reading said results data from said database;

determining whether the at least one condition is satisfied based on the ~~persistently stored~~ results data read from the database and the second database event.

52. (Currently amended) The computer-readable medium as recited in Claim 51, further comprising instructions for:

determining that the at least one condition is satisfied by determining that the second database event was detected within a particular time after detecting the first database event~~; and~~

~~wherein the persistently stored result indicates the time the first database event was detected~~.

53. (Currently amended) The computer-readable medium as recited in Claim 51, further comprising instructions for:

determining that the at least one condition is satisfied by determining that the second database event was not detected within a particular time after detecting the first database event~~; and~~

~~wherein the persistently stored result indicates the time the first database event was detected~~.

54. (Canceled)

55. (Canceled)

56. (Previously Presented) The computer-readable medium as recited in Claim 51, further comprising instructions for:

deleting the persistently stored result from the database after a period of time indicated by the at least one condition.

57. (Currently amended) The computer-readable medium as recited in Claim 51, further comprising instructions for:

determining that the at least one condition is satisfied ~~by~~ based on the ~~persistently stored~~ results data read from the database and the second database event; and

performing the at least one action ~~related to the composite event~~.

58. (Currently amended) The computer-readable medium as recited in Claim 51, wherein the composite event comprised of two or more primitive events, the at least one condition related to the composite event, and the at least one action ~~related to the composite event~~ are specified in an expression received by the database system, the expression identifying two or more primitive event structures, a join condition on the two or more primitive events, and the at least one action to perform in response to satisfying the join condition.

59. (Previously Presented) The computer-readable medium as recited in Claim 58, wherein the expression is specified using XML-extended SQL syntax.

60. (New) The machine-implemented method of Claim 42, wherein said first sub-condition is a condition on one or more attributes of said first one of the primitive events of which said first database event is an occurrence of.

61. (New) The computer-readable medium as recited in Claim 51, wherein said first sub-condition is a condition on one or more attributes of said first one of the primitive events of which said first database event is an occurrence of.